ABSTRACT

Shaped, contoured crushable structural members and methods for making the same are described. The contoured structural members comprise composite or metal materials sandwiching a support or stabilizing structure. The structural members are made crushable by incorporating an initiator into the structural members. The structural member crushes at the location of the initiator by absorbing the energy of an exerting load. The shaped structure is provided by bending the generally straight shape of the structural member. With a shaped, contoured, crushable, and generally non-flat structure, applications and uses for the structural members of the present invention are nearly limitless.